

SFIA, apprenticeships and work-based learning

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Outline

- Introduction to apprenticeships
- Our model of work-based learning
- Our use of SFIA
- Next steps

Apprenticeships @ Strathclyde

- The University offers a range of apprenticeship degrees covering a wide range of subjects across business, engineering and science at undergraduate and postgraduate level
- The apprenticeship route allows the learner to achieve the award of a degree while in employment
- We offer both Graduate Apprenticeships and Degree Apprenticeships
- For today, the focus is on a Graduate Apprenticeship: IT: Software Development, delivered by Computer and Information Sciences



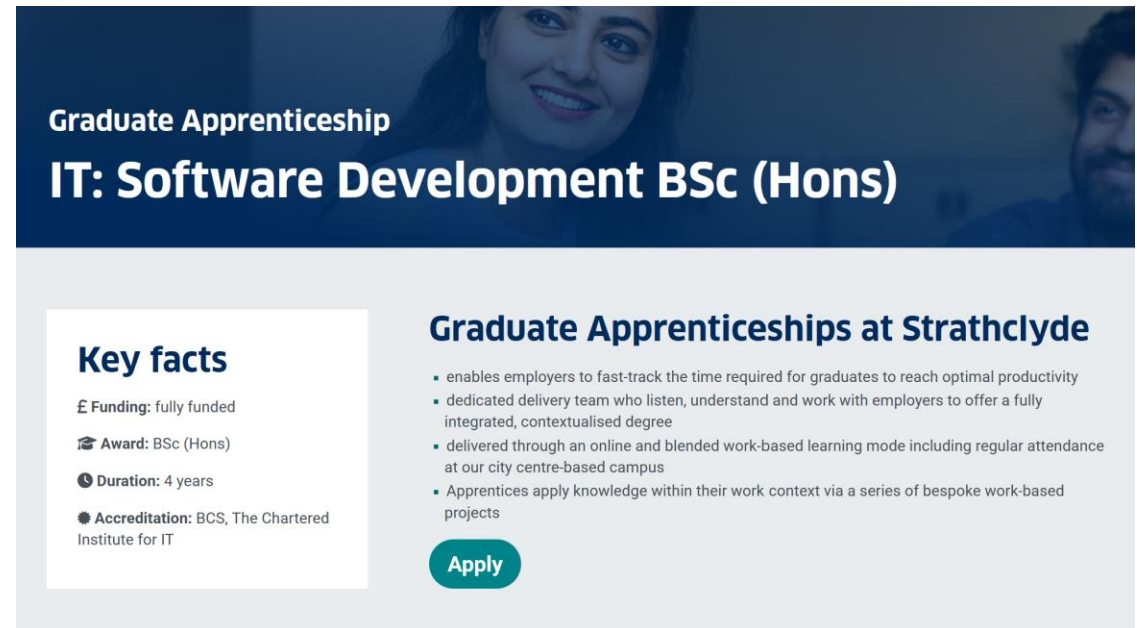
The University of Strathclyde is a leading provider of Graduate Apprenticeships and Degree Apprenticeships across Scotland and England.

Our industrial focus and external engagement provides an unparalleled foundation for apprenticeship degrees of the highest standard.

We offer businesses fully-funded programmes for both new and existing employees. These give apprentices the opportunity to earn while they learn, develop the skills and experience employers are looking for, and bring their learning straight back into the business.

Structure of the apprenticeship

- A blended approach: 4 days workplace / 1 day university per week
- Four years in duration, 3 x 12-week terms
- All core material delivered through virtual learning environment
- Mandatory on-campus days every four weeks
- Focus on producing “career-ready” graduates, but the reality is our learners add value very quickly
- BCS accredited



Graduate Apprenticeship
IT: Software Development BSc (Hons)

Key facts

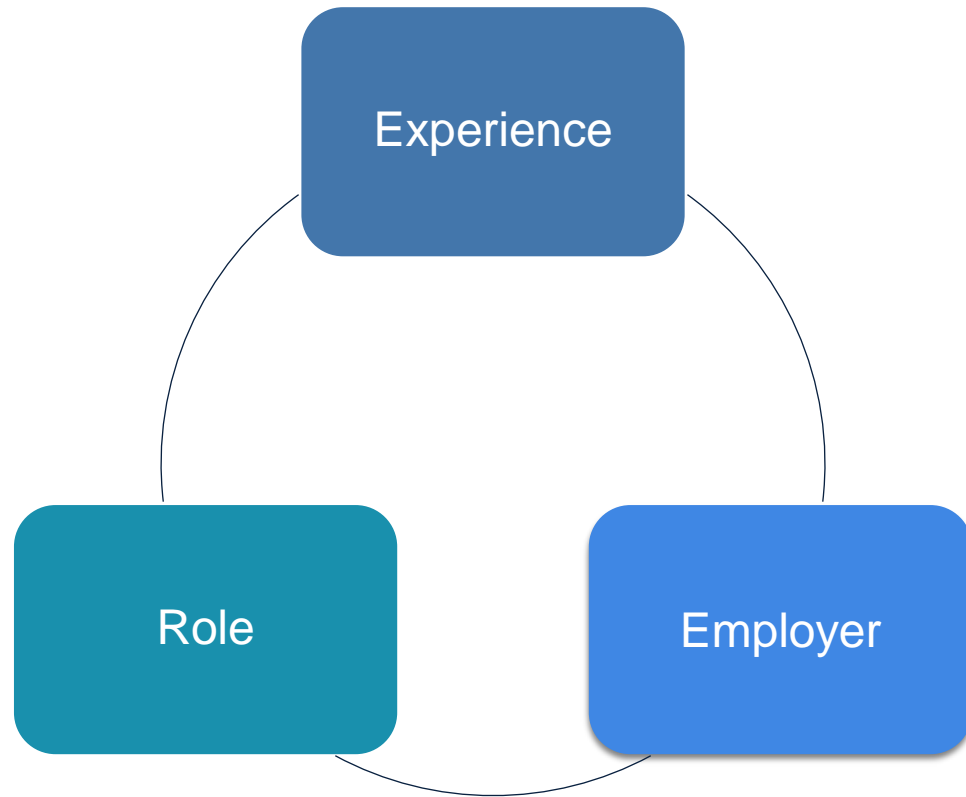
- £ Funding: fully funded
- 🎓 Award: BSc (Hons)
- 🕒 Duration: 4 years
- 🏆 Accreditation: BCS, The Chartered Institute for IT

Graduate Apprenticeships at Strathclyde

- enables employers to fast-track the time required for graduates to reach optimal productivity
- dedicated delivery team who listen, understand and work with employers to offer a fully integrated, contextualised degree
- delivered through an online and blended work-based learning mode including regular attendance at our city centre-based campus
- Apprentices apply knowledge within their work context via a series of bespoke work-based projects

[Apply](#)

Diversity of our apprentices




Work-based learning

- Work-based learning (WBL) is practical learning experience in the workplace
- WBL integrates theory and practice – application of academic concepts in the workplace
- Over 25% of credits for the programme are obtained through WBL
- The WBL thread runs throughout the programme, culminating in a work-based 4th year honours project



What problem are we trying to solve?

- How do we deliver WBL...
- ...to apprentices with a variety of backgrounds and job roles...
- ...in an academically rigorous manner...
- ...while not over-assessing....
- ...in a resource efficient delivery...
- ...and providing "outstanding education and student experience" (Strathclyde 2030)



Strathclyde 2030
Strathclyde 2030 Introduction

The University of Strathclyde's purpose is built around delivering

- Outstanding Education & Student Experience
- World-Leading Research
- Transformative Innovation & Impact

In that delivery, our Values reflect who we are and help us to navigate on the journey, demonstrating what we believe in and what we stand for.

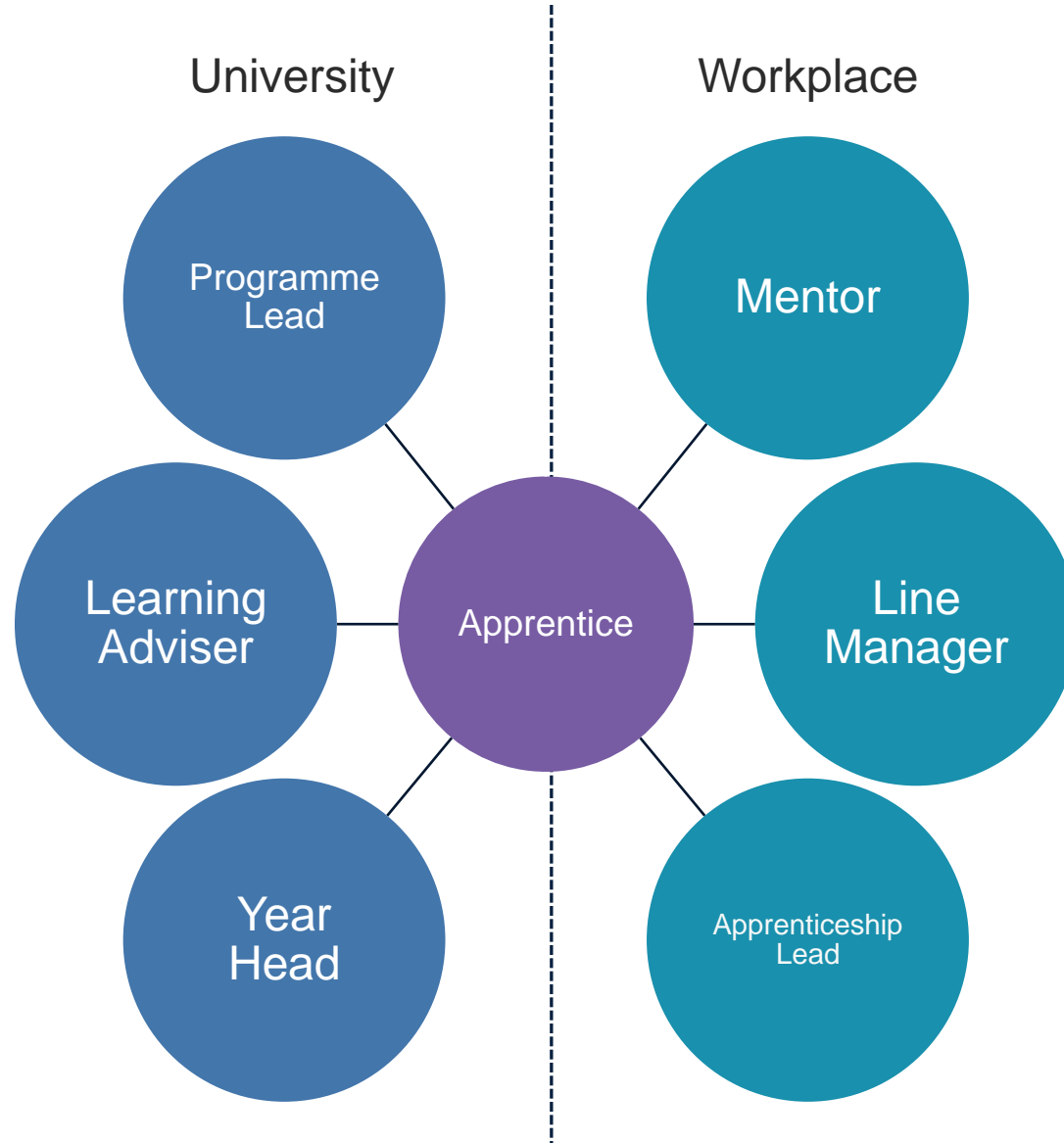
We are

- People-oriented
- Innovative
- Collaborative
- Ambitious
- Bold

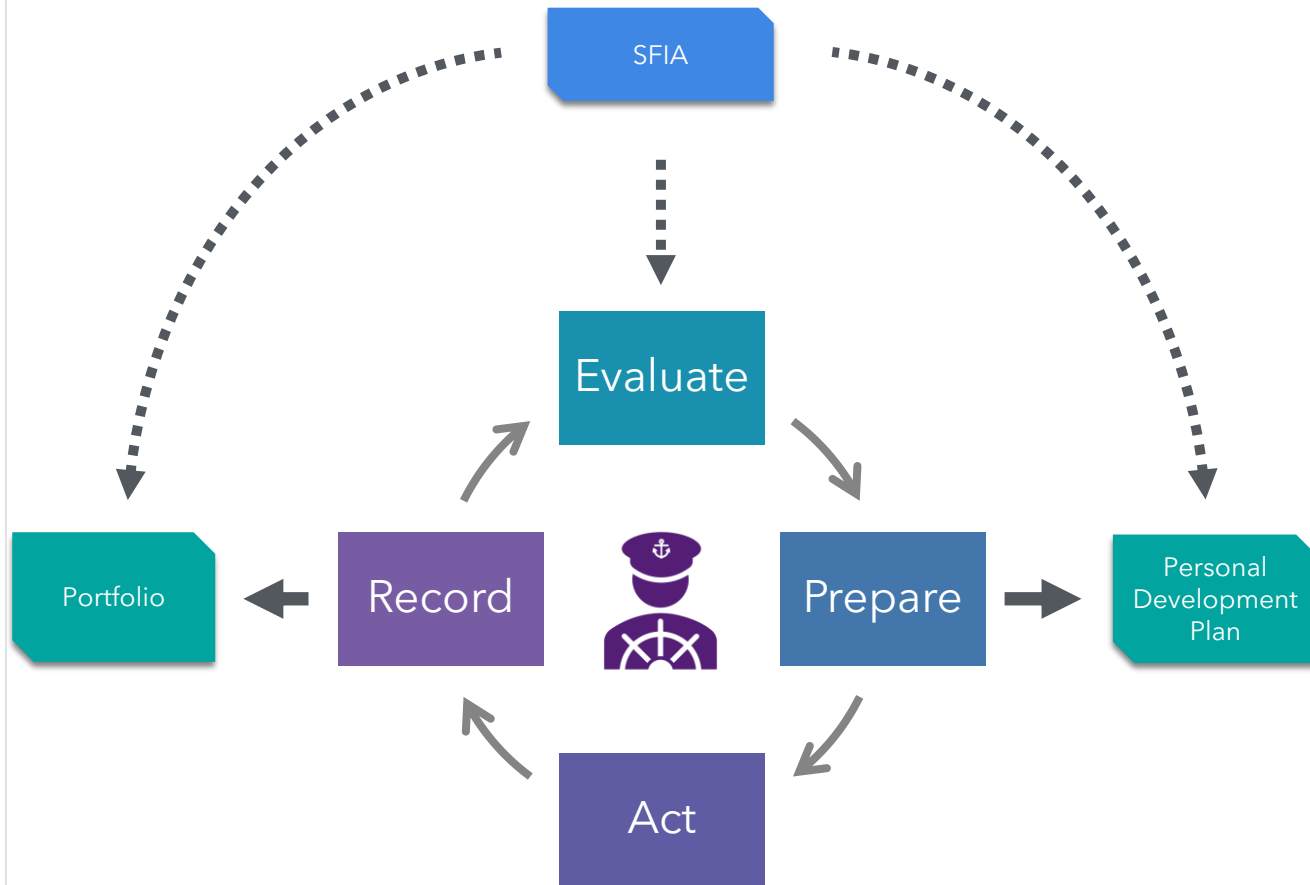
Assessing WBL

- Direct assessment through observation or examination of work products is challenging
 - Access to the workplace
 - Confidentiality
 - Time
- Instead, we primarily use indirect assessment through authenticating indirect evidence – a *portfolio of evidence*
- To make an “outstanding experience” we need to go beyond mechanical portfolio management
- We also need to encourage engagement with the WBL process

Supporting our apprentices



A learner-centred process



- Evaluate – understand where competency lies and where focus is needed
- Prepare – record areas for development and translate these into specific objectives (Personal Development Plan, PDP)
- Act – Take action to make progress on these objectives
- Reflect – Document learning in the form of evidence that is collected in the portfolio, mapped against SFIA

The Personal Development Plan (PDP)

- Apprentices complete a PDP every 6 weeks
- Key PDP areas:
 - Personal analysis
 - Objective setting
- We assess their *engagement* in this process
- We encourage discussion with line managers and alignment with organisational objectives

DEPARTMENT OF COMPUTER & INFORMATION SCIENCES



Work-based Learning Personal Development Plan

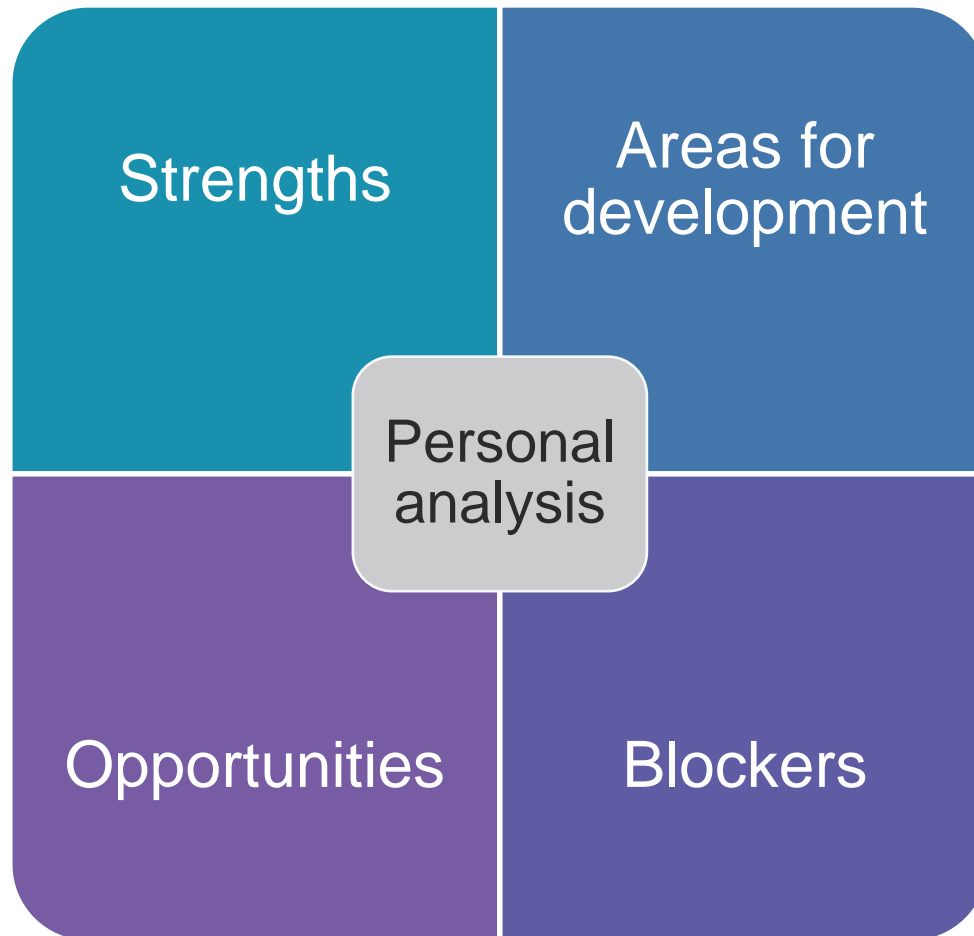
Name:	<name>	Date:
Reviewed by: (line manager)	<name>	Date:

Guide to completion

Part 1: Personal Analysis

Strengths. Include at least three strengths. For each strength, describe how it is demonstrated and why it is relevant to your job role. Number each strength. Ensure the strength is given a brief, effective label that can also be used for referencing (e.g. 'Communication', 'Active Listening', 'Efficiency', etc.)

The PDP – personal analysis



Strengths and Areas for Development are generic at first, but subsequently use portfolio of evidence to guide and directly reference SFIA

The PDP – objective setting

- Short term (6-week) objectives
- Medium term (6-month) objectives
- Each objective must be SMART
- Each objective must be linked to one or more Areas for Development

Part 2: Objectives

Short term objectives (Next 6 Weeks)	
Objective	AfD References
Medium term objectives (Next 6 Months)	
Objective	AfD References

The PDP

- For most learners, on joining the programme personal analysis and objective setting are new skill that must be learned
- We run several workshops on this very early in the programme
- Apprentices are provided with written/verbal feedback on each iteration of their PDP



The Portfolio

- Off-the-shelf e-portfolio system
- Evidence is written up using an evolution of STARR, STARRC
- Each item of evidence must clearly link to one or more competencies
- Per-evidence feedback provided through e-portfolio system
- We assess *quality* and *quantity* of evidence, with summary feedback every six weeks

Title

SFIA webinar

Situation

Define the general context (e.g. who / what / when / why) and background leading to the task.

Task

Describe the key objective/issue that you addressed.

Action

Describe the action you took or initiated, emphasising the skills you used to complete it. This can include aspects such as what you did, who you worked with, did you require assistance, who did you communicate with.

Results

Summarise the outcome in business terms.

Reflection

What did you learn and what might you do differently? If no new knowledge or skills were gained, reflect on your application of existing skills and knowledge.

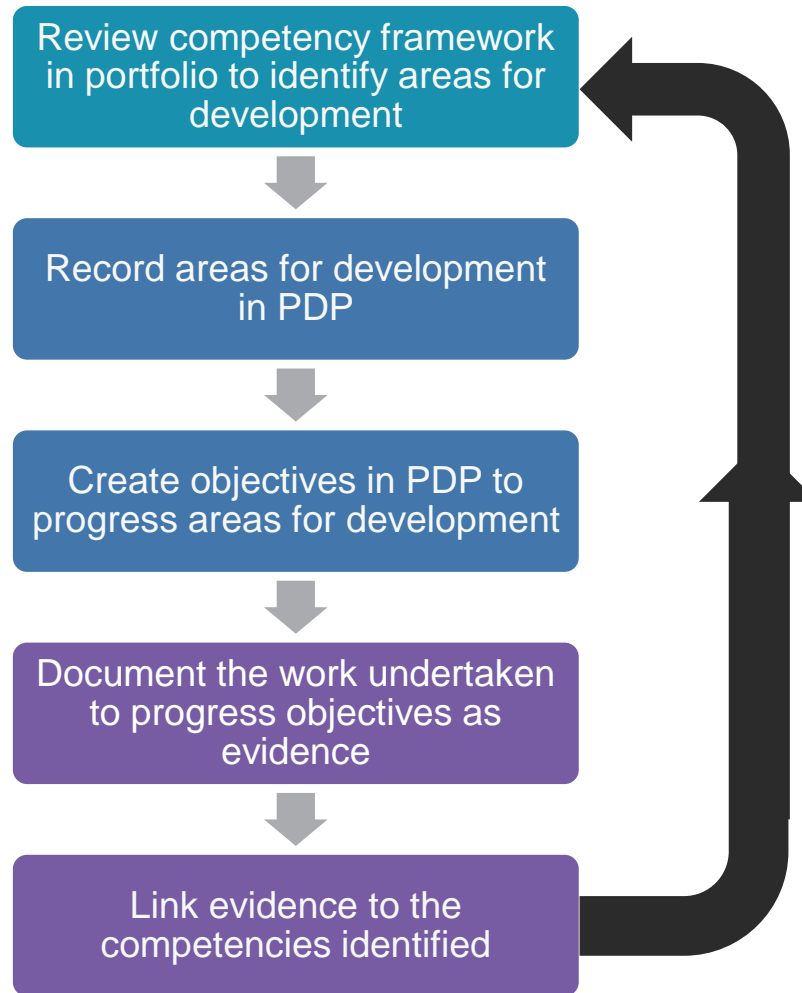
Competencies

List the competencies which this evidence supports. Use statement such as "In this task, I demonstrated this competency by..." Ensure that your evidence description clearly demonstrates the competencies listed.

Linking evidence

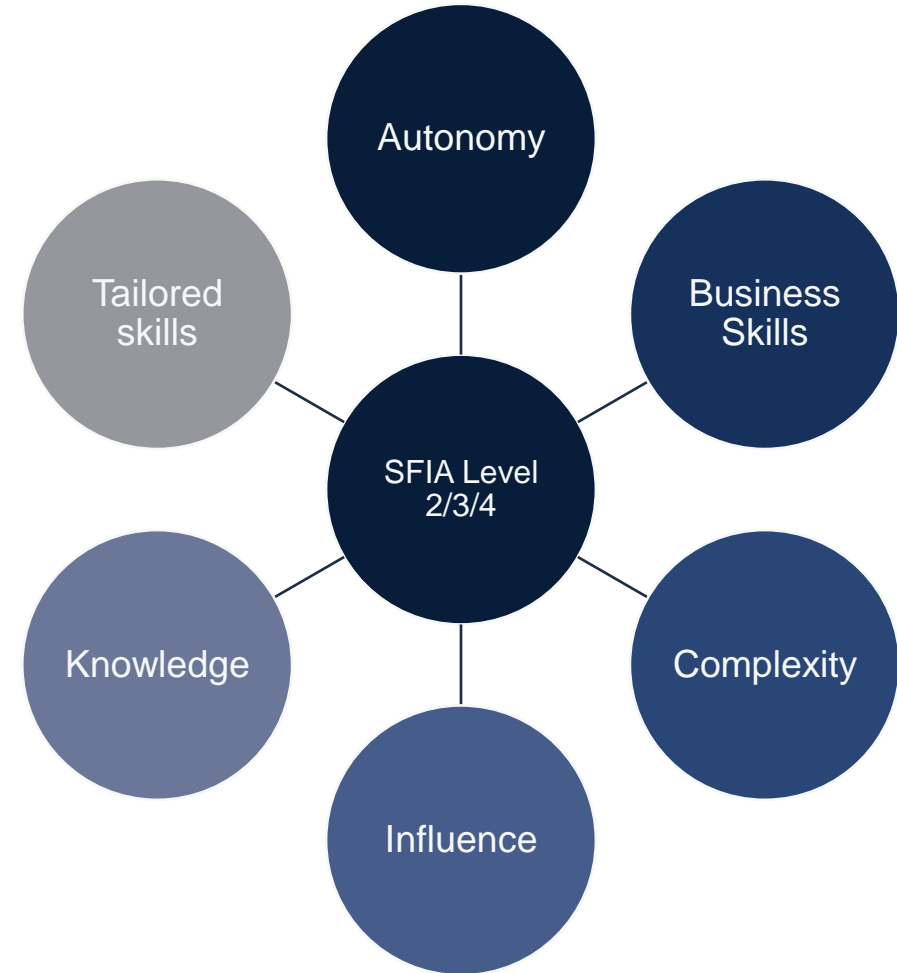
- Evidence can be linked to one or more competency
- We mandate “linkage” phrases such as:
 - “During this task I demonstrated <insert competency> as I <short description of how>”
 - “I was able to show <insert competency> through <short description of how>
- This linkage...
 - Discourages “scattergunning”
 - Forces the Apprentice to confirm which elements of the evidence really demonstrates the competency
 - Helps the Learning Adviser to understand the apprentice’s comprehension of the competency

Another view of the process



Using SFIA as a WBL framework

- Primarily utilise the SFIA professional skill Programming/Software development...but we can drop in others if needed
- This is combined with the 5 generic *attributes* (Autonomy, Influence, Complexity, Business Skills and Knowledge) to provide a comprehensive framework for our learners.
- Vital that apprentices consider not only their technical competency, but the much wider skill set needed to be a successful employee.
- The generic attributes provide the mechanism for exactly this and are invaluable in assisting apprentices in building a rounded skill set.
- The nature of SFIA allows us to support apprentices with a variety of backgrounds and job roles



Progression - SFIA level

- SFIA levels allow competency to be assessed from day 1(-ish) and to grow with apprentice experience
- Initially work towards achieving the Level 2 (Assist) from the SFIA framework
- In subsequent years moving onto level 3 (Apply) then 4 (Enable)
- Some apprentices may progress more quickly, some less
- Level 4 is deliberately challenging - leads into the final year project

Y1T1	Level 2: Assist
Y1T2	
Y1T3	
Y2T1	Level 3: Apply
Y2T2	
Y2T3	
Y3T1	Level 4: Enable
Y3T2	
Y3T3	
Y4T1	
Y4T2	
Y4T3	

“Learning to speak” SFIA

- We split the skill statements into distinct competencies, grouped by skill area
- These are uniquely numbered by us
- We provide additional commentary to assist apprentices with interpretation
- We hold workshops to assist with understanding competencies and linkage
- Apprentices complete formative exercises to help with their understanding:
 - Summarising areas of least/most progress over a period of time and reflect on why
 - Provided with a scenario and ask questions around the competencies demonstrated by the actors

2.B.1 - Identify and negotiate own development opportunities.

Apprentices should be proactive in finding opportunities to enhance their career. These could be technical, business or in communicating and collaborating skills. They should also update their personal development plan at regular intervals.

2.K.1 - Absorb new information when it is presented systematically and applies it effectively.

Apprentices will be presented with technical and non-technical information and should take steps to embed that knowledge and apply it in future situations. This will be evidenced by increasing autonomy and reducing need to ask colleagues for assistance.

Learning Advisers

- Each apprentice is supported by a designated Learning Adviser
 - LA provides overall guidance tailored to the apprentice and their role
 - Assists with interpretation of competencies as applicable to the apprentice
 - Provides detailed and general feedback at each feedback opportunity
- LA/Apprentice meet 1:1 twice per term
 - Wellbeing
 - A structured conversation around PDP and portfolio
 - Feedback on overall progression
- LAs all have industry experience

Working with employers

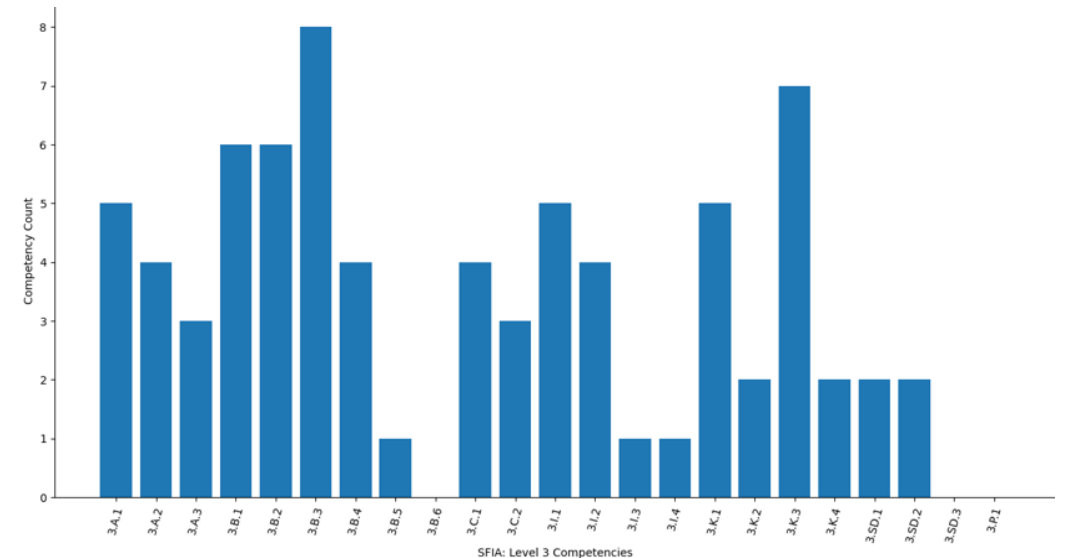
- All employers are invited to an engagement workshop at the start of the academic year
- Line managers are provided with:
 - A quick guide to WBL and expectations of apprentice support
 - A guide to SFIA tailored to the apprentice progression on the programme
 - Ongoing dialogue with Learning Adviser
- We hold periodic curriculum review events with employer partners



Assessing WBL

- We assess *engagement with and quality* of WBL, summarised as a checkpoint review
- There is a clear rubric setting out engagement levels and quality expected across various dimensions
- Apprentices receive review feedback twice per term, in a standard format report
- Reviews are undertaken by individual LAs and a standardisation meeting is used to ensure consistency of assessment...
- ...however, aspects of the review are automated (e.g. portfolio progress)

Checkpoint review detail	Journal Entries	Evidence Quality	Evidence Frequency	Evidence Linkage	Personal Development Plan	Meeting Conduct	Assignments	Overall
Performing Well	Journal entries completed most weeks, and in the correct format		Evidence is ample (more than three entries every six weeks of the evaluation)		All PDPs submitted on time to a good standard.	Apprentice attends all meetings on time as originally scheduled or with clearly notified rescheduling and is well-prepared.		
Room for Improvement								
Performing poorly		Evidence is structured poorly or the writing is generally limited.		Justification in linkage is present but is not backed up by demonstrable experience or is based on a misunderstanding of the competency.			Assignments not submitted on time and resubmission required	Performing poorly in at least one area
Unacceptable performance								



4th year project

- Apprentices complete a significant final year project module comprising:
 - A workplace project - value-adding technology delivery
 - A portfolio report on Level 4 competency demonstration
- While the L4 portfolio should be significantly progressed by the start of 4th year, the workplace project can be designed to help “round out” the portfolio
- The Learning Adviser works with the apprentice and employer on a suitable project scope

Y1T1	Level 2: Assist
Y1T2	
Y1T3	
Y2T1	Level 3: Apply
Y2T2	
Y2T3	
Y3T1	Level 4: Enable
Y3T2	
Y3T3	
Y4T1	
Y4T2	
Y4T3	

4th year project – portfolio report

- For each Level 4 competency:
 - Explain understanding of the competency
 - Select and summarise key evidence associated with the competency
 - Reflect on the degree to which the competency has been demonstrated and how gaps could be filled
- This model allows apprentice who have not appropriate opportunities to still achieve a good result
 - Can undertake research, look to senior colleagues, ...
- Also provides a platform for next stages of professional development

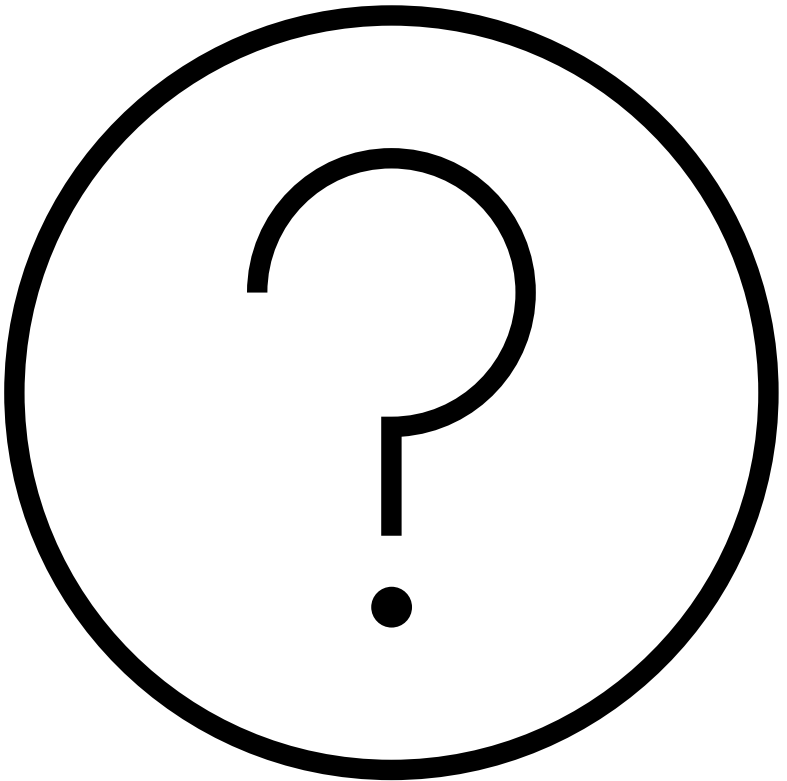
An outstanding experience

- Our approach provides the apprentice with the skills to actively manage their career
- Supports and aligns with organisational performance and development review activities
- SFIA assists in developing employees with a more rounded skillset
- Encourages wider contribution from the apprentice to the organisation
- Build awareness of a global skills framework that will serve the apprentice throughout their career
- Provides a platform for future career development



Next steps

- Analysis of apprentice portfolios to understand if/where we need to provide further support
 - Additional learning material to navigate and use the framework
 - Consistent gaps in areas of experience where we need to engage employers
- “Use of AI”
- Collaborate with other institutions to share SFIA experience in WBL and placement activities
- Develop a toolkit with SFIA Foundation:
 - for education providers
 - for employers to support early career professionals





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